FIG.1

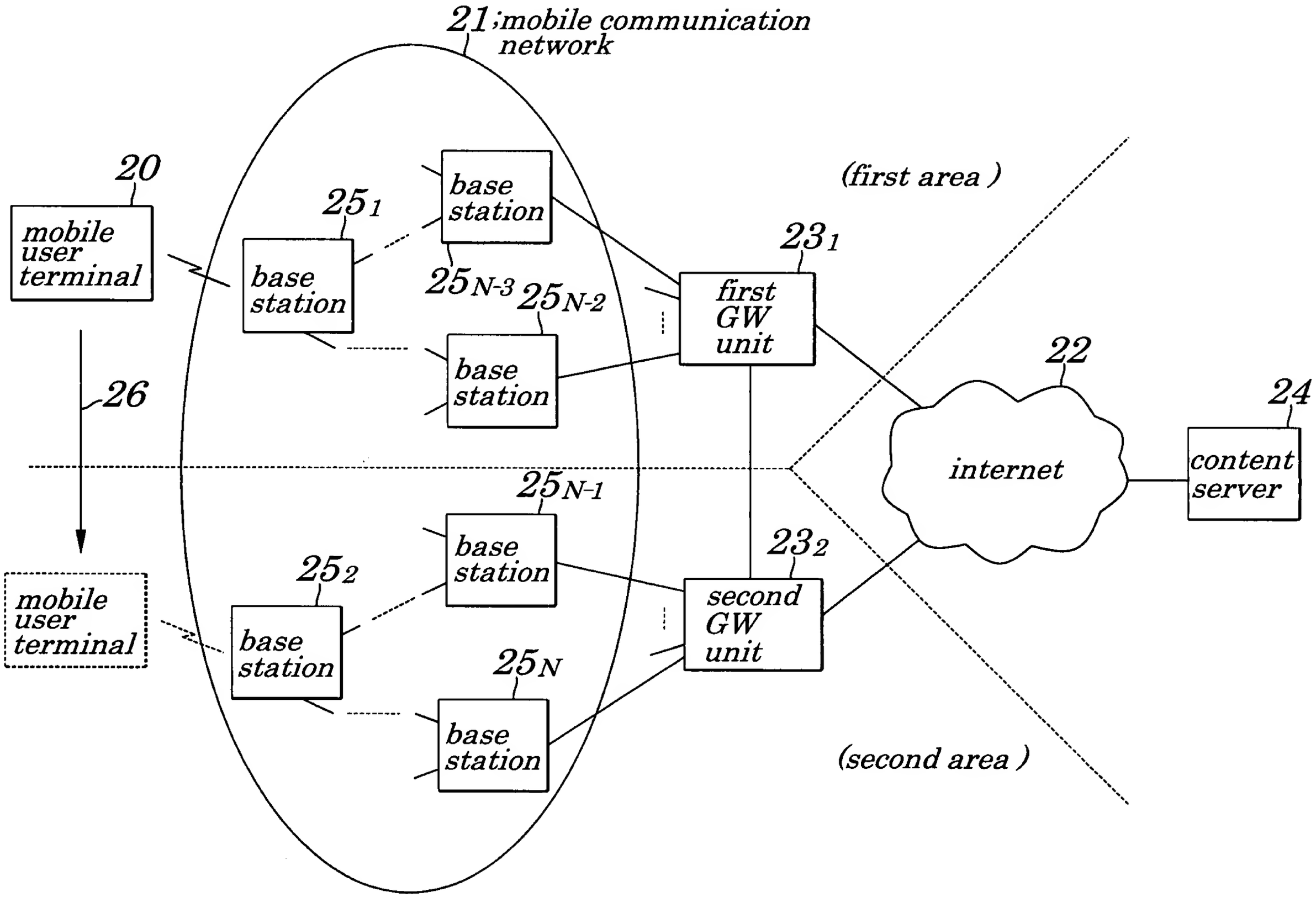

21;mobile communication network
20
mobile user terminal
26
mobile user terminal
25 1
base station
25 N-3
25 N-2
base station
base station
25 N-1
base station
25 2
base station
25 N
base station
23 1
first GW unit
23 2
second GW unit
(first area)
(second area)
22
internet
24
content server

FIG.2

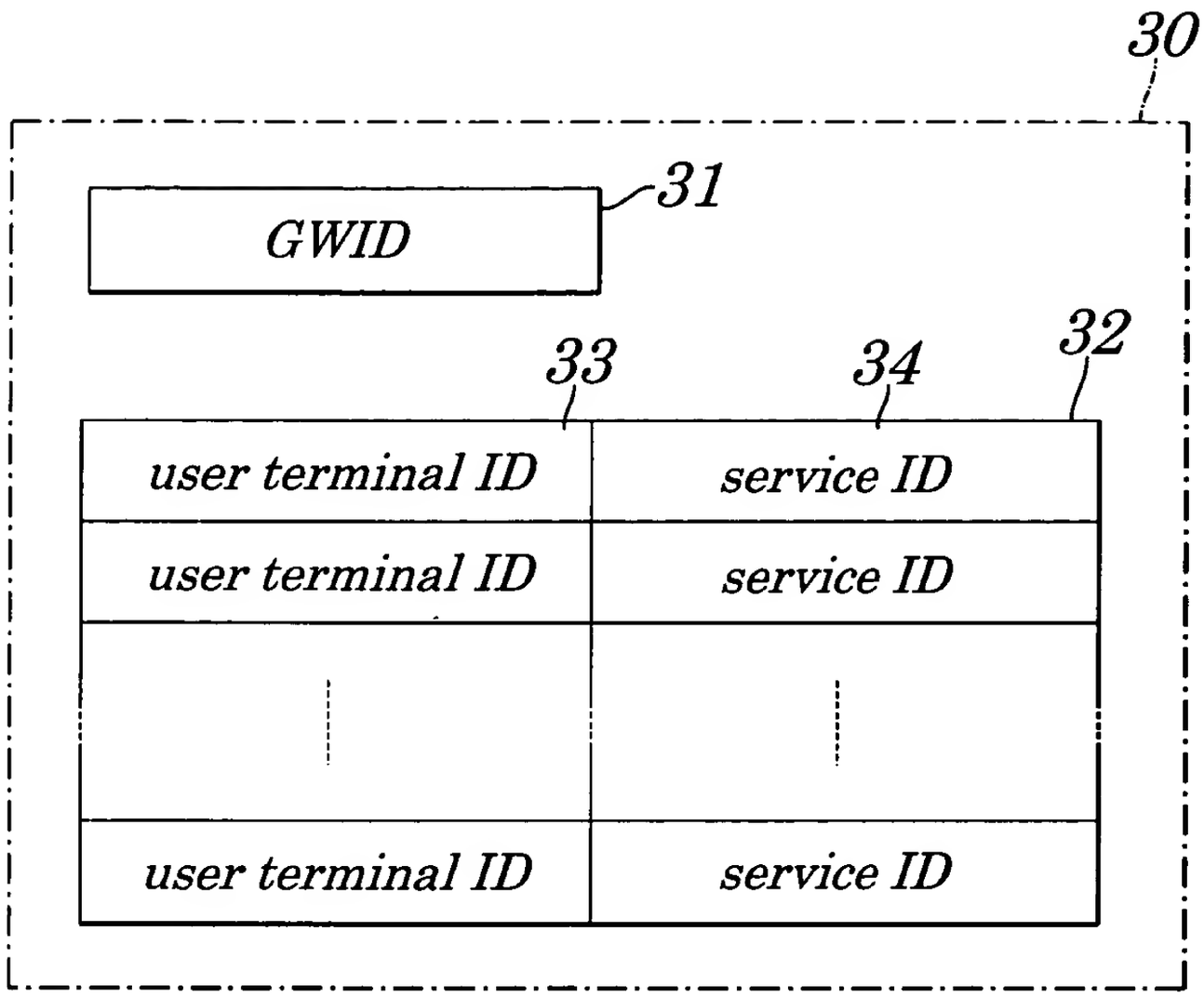

30
GWID
31
33
34
32
user terminal ID
service ID
user terminal ID
service ID
user terminal ID
service ID

FIG.3

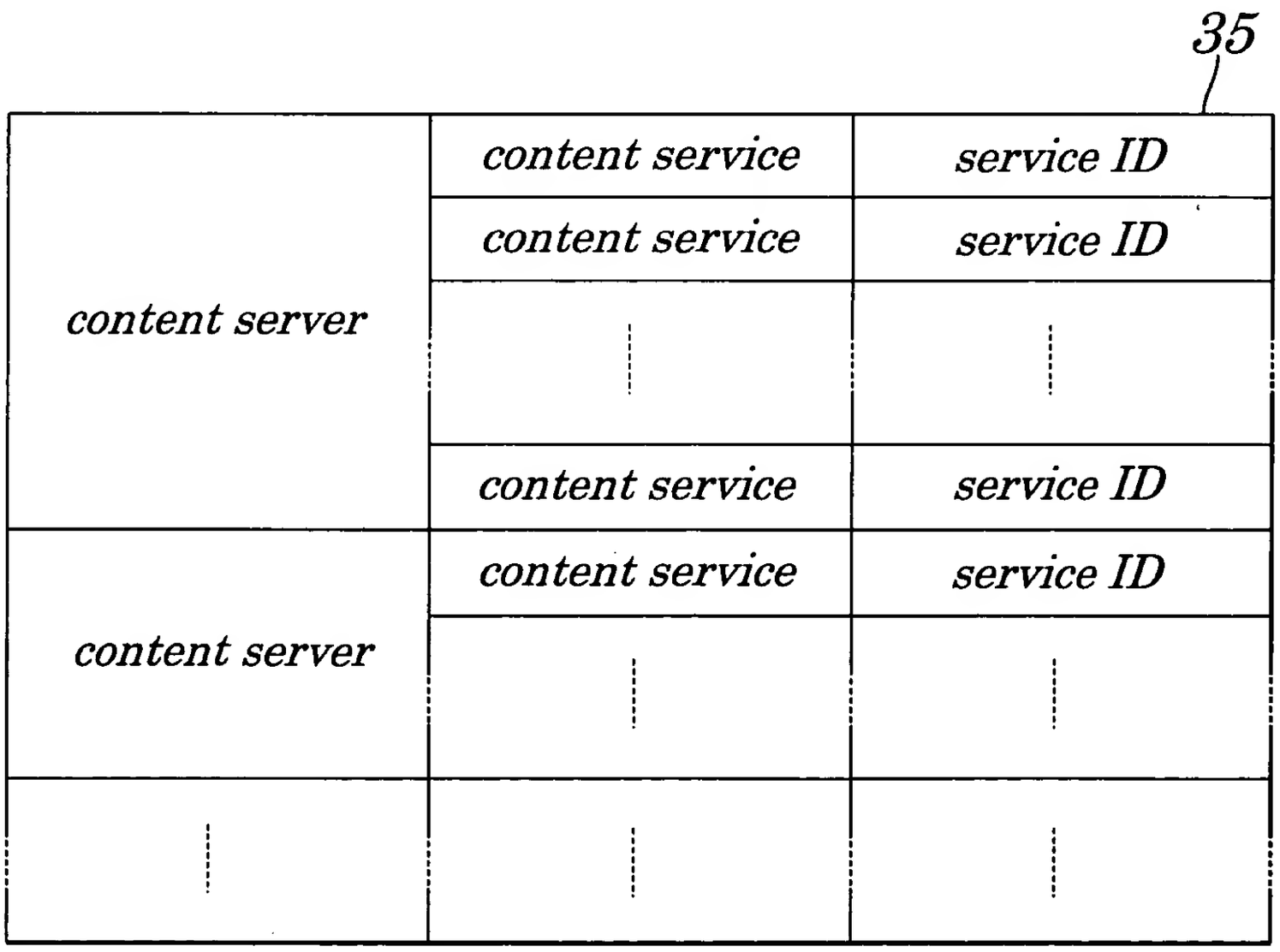

35
content server
content service
service ID
content service
service ID
content service
service ID
content server
content service
service ID
content service
service ID

FIG.4

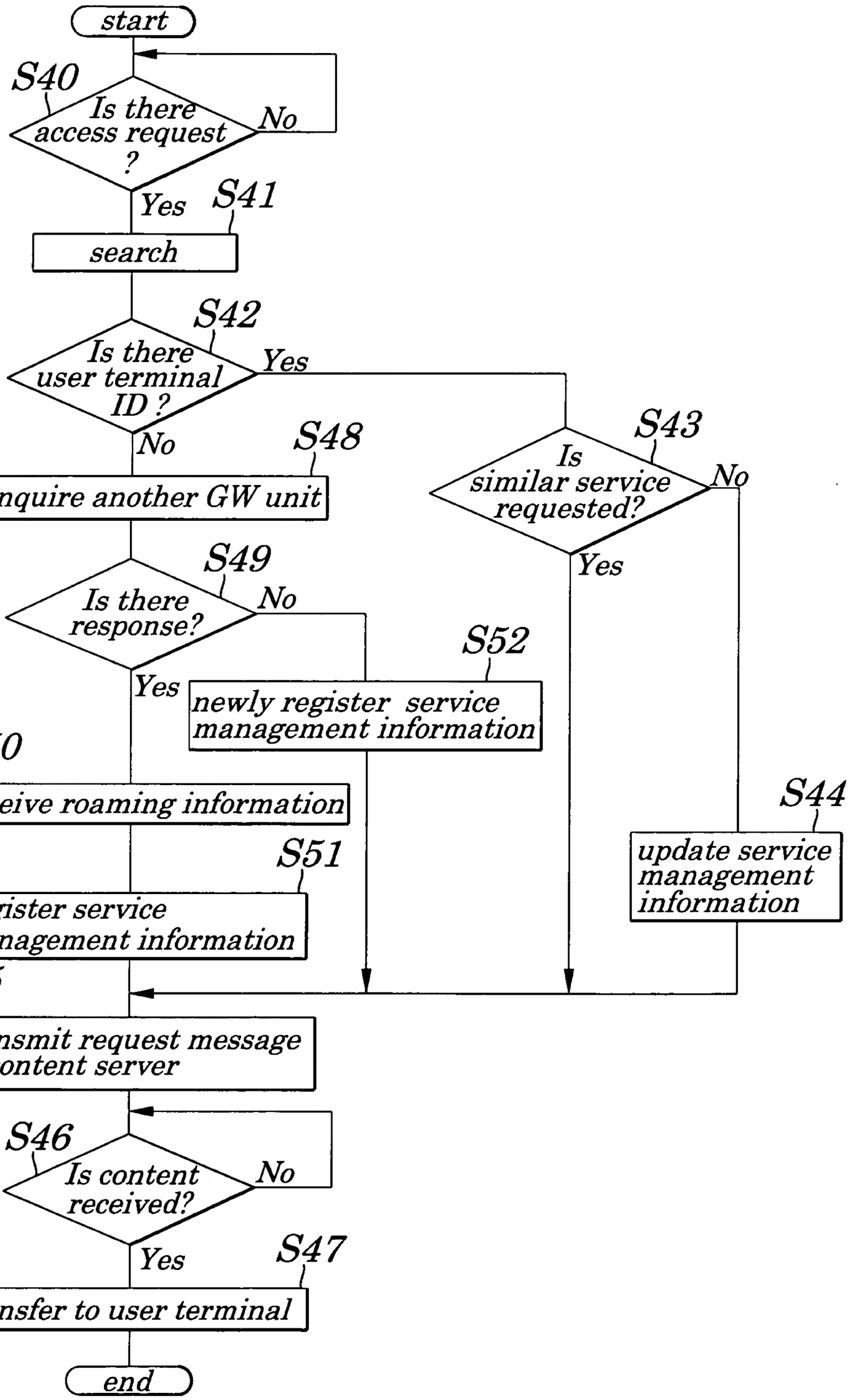

start
S40
Is there access request ?
No
Yes
S41
search
S42
Is there user terminal ID ?
Yes
No
S48
inquire another GW unit
S43
Is similar service requested?
No
Yes
S49
Is there response?
No
Yes
S52
newly register service management information
S50
receive roaming information
S51
register service management information
S44
update service management information
S45
transmit request message to content server
S46
Is content received?
No
Yes
S47
transfer to user terminal
end

FIG.5

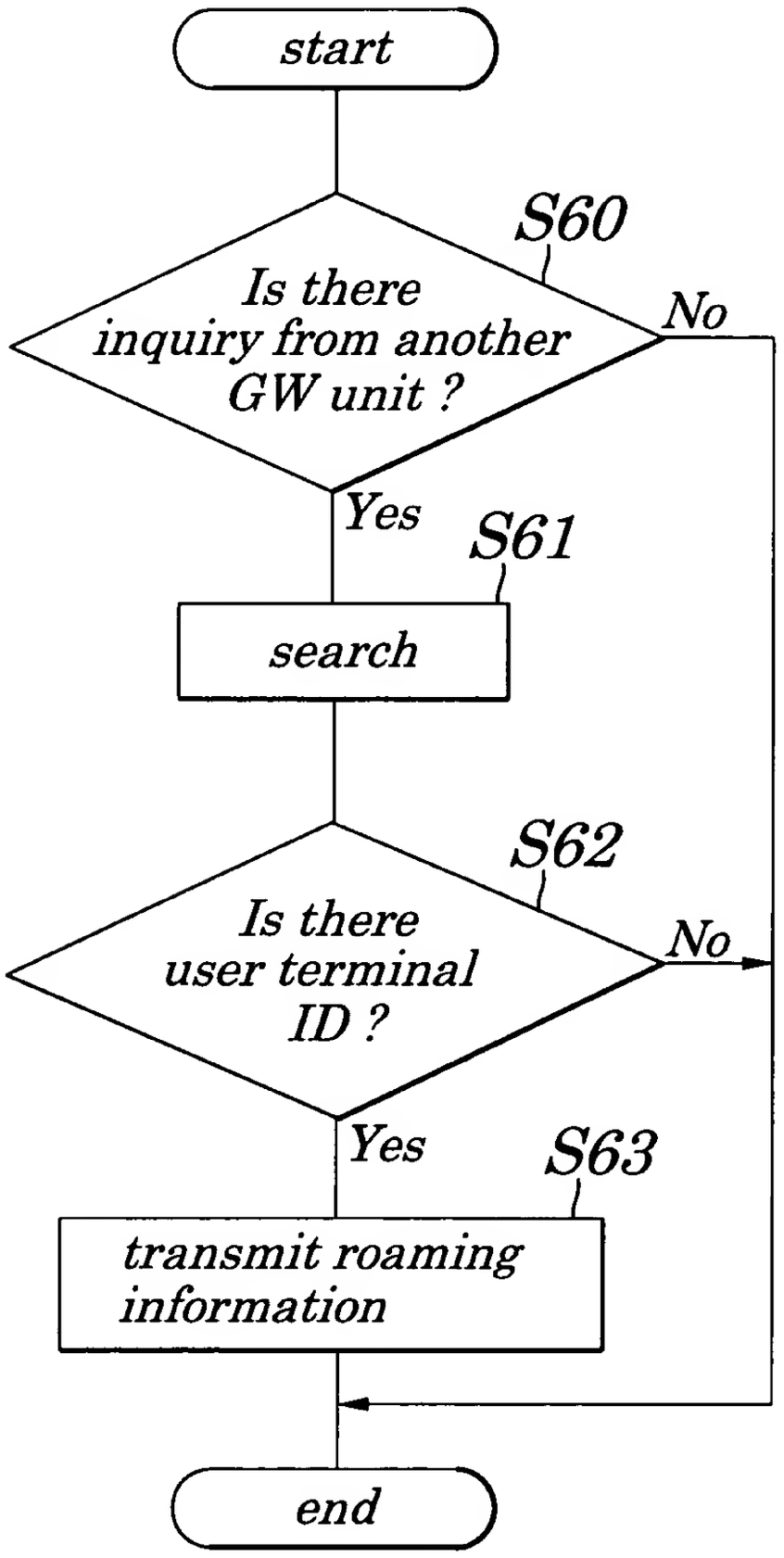
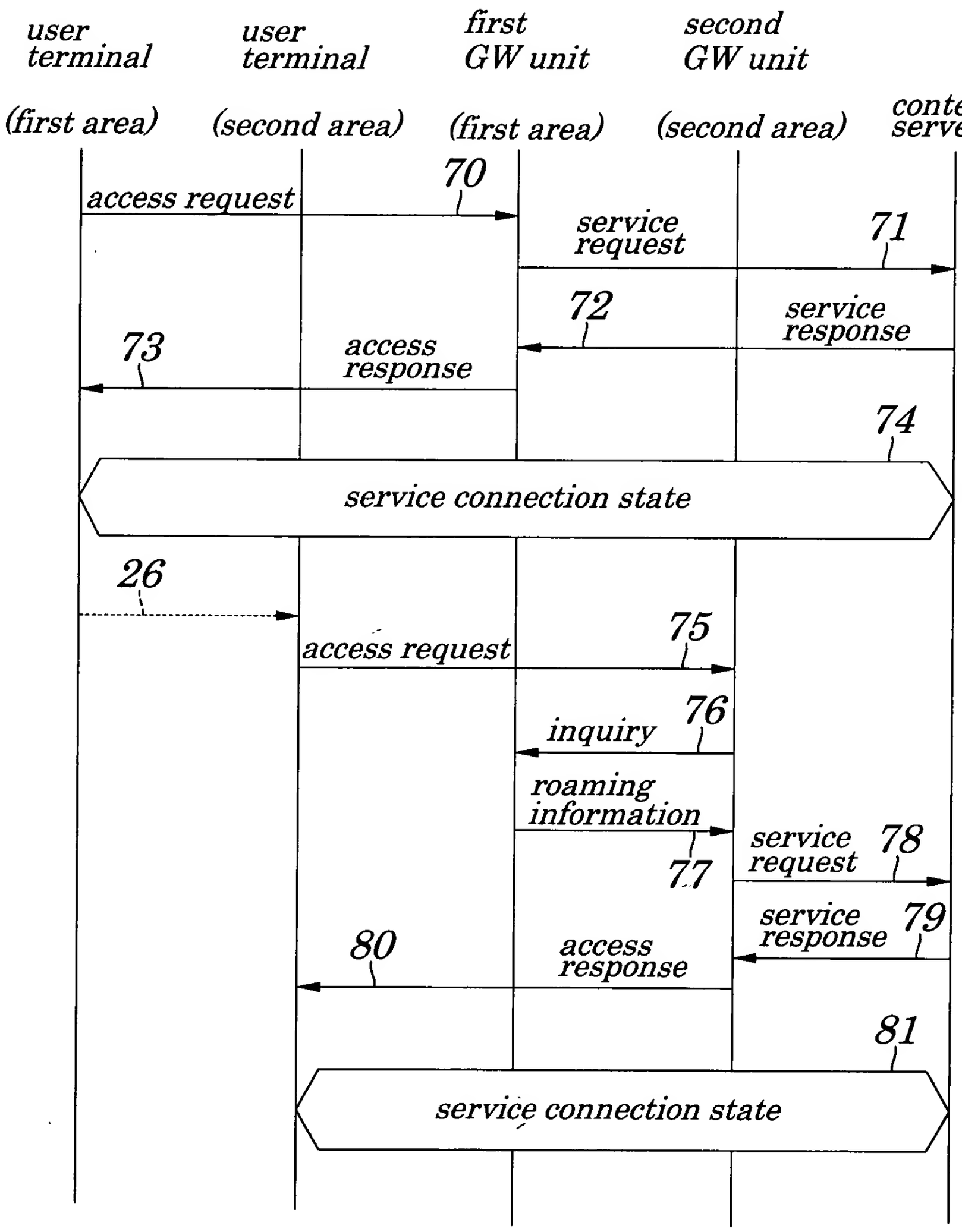

start
S60
Is there inquiry from another GW unit ?
No
Yes
S61
search
S62
Is there user terminal ID ?
No
Yes
S63
transmit roaming information
end

FIG.6


user terminal (first area)
user terminal (second area)
first GW unit (first area)
second GW unit (second area)
content server
access request
70
service request
71
72
service response
73
access response
74
service connection state
26
access request
75
inquiry
76
roaming information
77
service request
78
service response
79
80
access response
81
service connection state

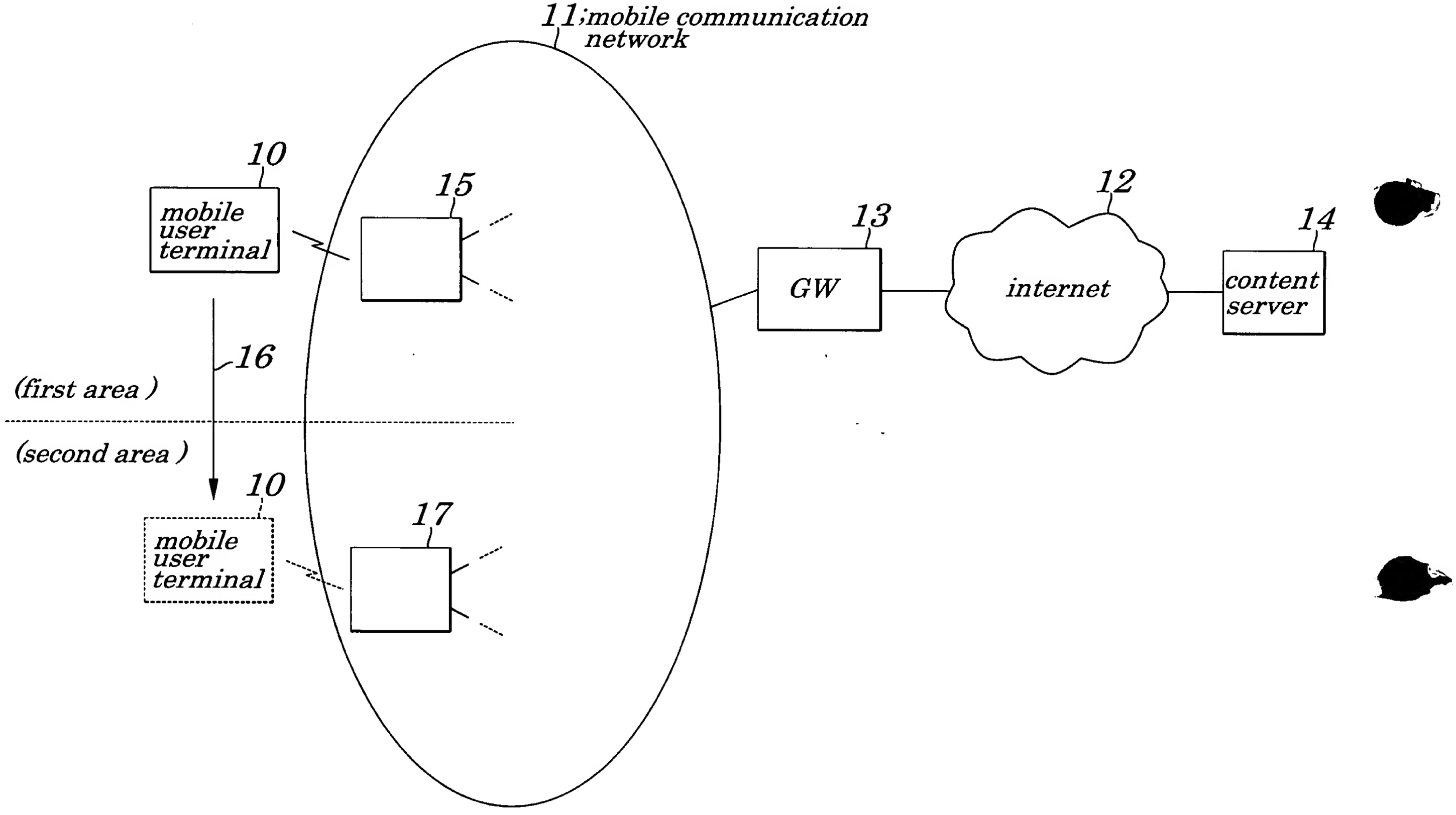



FIG. 7 (PRIOR ART)